BRUHAT BANGALORE MAHANAGARA PALIKE
YELAHANKA ZONE

Estimate Cost Rs. 2500000.00

Name of Work: Drilling of Borewells and providing pipe line to existing Borewell at Maruthinagara and surrounding area Ward No -01

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P W S S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site, engaging techinical personal and labour required etc., as per Specification and direction **(P.48, I. 9.4) PRED.SR 2012-13**	Each BW	3				3	1938.46	5815.00
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **P. 46 / I. 9.1 PRED SR 2012-13**	Rmtr							
	0 to 50 m		3	50.00			150.00	315.18	47277.00
	50 to 100 m		3	50.00			150.00	412.00	61800.00
	100 to 150 m		3	50.00			150.00	458.35	68753.00
	150 to 200 m		3	50.00			150.00	484.10	72615.00
	200 to 250 m		3	50.00			150.00	560.32	84048.00
	250 to 300 m		3	50.00			150.00	600.49	90074.00
	300 to 350 m		3	50.00			150.00	640.66	96099.00
3	Supply of ISI mark 175 mm nominal bore, Plain end steel casing pipe - grade of Steel Fee 410 of wall thickness 5.4mm thick confirming to IS 4270:2001 and latest amendments, electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by baseic open hearth electric or basic oxygen process in random length of 5 to 7 mts both ends threaded confirming tio IS 554/1985, one end fixied with socket confirming to IS 4270:2001 and the other end with screwed pipes ISI Marking weighing 25.10Kg/mtr (Inclusive of all taxes and durties) Prices include Collar-medium duty (PRED Bangalore Circle SR 2012-13 **P. iii, I No. 84 PRED SR 2012-13)**	Rmtr	3	65.00			195.00	1325.00	258375.00
4	Providing 200mm dia PVC pipe 10kg/cm2 (PRED Bangalore Circle SR 2012-13 P.15 It.3.43)	Rmtr	3	25.00			75.00	1721.13	129085.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
5	Providing and fixing 175mm Borewell Cap (PRED Bangalore Circle SR 2012-13 P.No.iii, I No. 85)							16.67	
		Each	3				3	100.00	300.00
6	Providing and fixing 175mm dia MS collar (PRED Bangalore Circle SR 2012-13 P.No.iii, I No. 86)								
		Each	10				10	150.00	1500.00
7	Supply and delivery of submersible pump sets suitable for borewell of 165 mm dia with specified dyty conditions as detailed below and satisfying performance characteristics for pump and moter specified in BIS with ISI mark with a minimum efficiency of 42% pump shall confirm to IS 8034/2002 and motor conforming to IS 9283/1995 with ISI certification with latest amendments for the following. 15HP/75KW ATALANTA/SUGUNA/CRI/KIRLOSKAR /OTHER EQUIVALENT PUMPS (page no XXXXII / Sl No 33 Code No 2)2016-17								
		No	3				3	70600.00	211800.00
8	Providing and fixing in trenches galvanised / mild steel tubes (medium grade) 50 mm dia nominal bore with all fittings (earth work in trenches to be measured and paid for separately) including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. (SR of PWP, & IWTD SR 2016-17, P No 90, I No 13 15)								
		Rmtr	3	330.00			990.00	457.92	453341.00
9	Heavy Duty Collar 50 mm dia								
		Nos	165				165	130.00	21450.00
10	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to table 3 class 5 of IS 8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694 1990 & confirming to GTP of **GROUP-A. P. No. 12 / I No. 2.10.4(1) 3C x 6 Sqm mm KPWD Electrical SR 2014-15**								
		Mtr	3x2	258.00			1548.00	188.70	292108.00
11	Labour charges for erection as new /repaired submercible pumpset allong with GI pipe (32/50mm) cable (new submercible pumpset if required will be supplied by the department free of cost and released pumpset shoud be handed over to department including transportation (Each lenth =6.00) **Page No. 558, Items No-3 BWSSB SR for 2014-15)**								
	((4x270)/6)=180.00	Per Length	1	180.00			180	88.00	15840.00
12	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc., **P No. 44 / I No. 6.6.6 KPWD Electrical SR 2014-15**								
		Each	3				3	302.00	906.00
13	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq mm wire armoured) confirming to IS-3975 1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1 1988 & confirming to GTP of GROUP-A **P No. 55/ I No. 7.4.4 4 core 16 Sqmm KPWD Electrical SR 2014-15**								
		Mtr	3	50.00			150.00	140.40	21060.00
14	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required In existing trench/duct. **P No. 61 / I No. 7.8.1 6Sqmm to 16 Sqmm) KPWD Electrical SR 2014-15**								
		Mtr	3	50.00			150.00	10.80	1620.00
15	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete (As per Civil SR KSRB I-2, P-7) **P No. 61 / I. No. 7.9.3 KPWD Electrical SR 2014-15**								
	For Cutting Road Surface	Mtr	3	25.00			75.00	85.00	6375.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
16	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV **P. No. 62 / I No. 7.12.1 KPWD Electrical SR 2014-15**								
	40mm dia GI pipe	Mtr	3	4.00			12.00	345.00	4140.00
17	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc., **P. No. 62 / I.No. 7.13.2 KPWD Electrical SR 2014-15**	No							
	16Sqmm		3				3.00	280.00	840.00
18	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia, **(P No. 55, I No. 7.1) KPWD Electrical SR 2014-15**	No							
			3				3	2727.00	8181.00
19	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers **P No. 44 / I No. 6.7.2 KPWD Electrical SR 2014-15**	No							
	32 Amps		3x6				12	180.00	2160.00
20	KSRB 13-7.1-4 Providing and fixing in position 50mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 Page **No. 93 Item No. 13.55 / PWD SR 2016-17**	Nos							
			3				3	1585.76	4757.00
	Basic Rate	1496.00							
	Area Weightage @ 6%	89.76							
	Total	**1585.76**							
21	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete 50 mm dia. **P. No. 92 / I. No. 13.81.3 PWD SR 2016-17**	No							
	50mm dia		3				3	227.90	684.00
	Basic Rate	215.00							
	Area Weightage @ 6%	12.90							
	Total	**227.90**							
22	Supplying and fixing 50mm dia GI X nipple with ISI mark with all lead and lift loading unloading and labour charges etc complete	No							
			3	4.00			12	80.00	960.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
23	Supplying shunt capaitors conforming to IS 2834, 3phase 400/440 volts grade for power factor improvement of rotating machinery, Capacitor in KVAR rating Nos. 2KVAR capacity with all lead and lift =, loading, unloading and labour charges etc complete as per specifications	No							
			3				3	350.00	1050.00
24	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. **5-32Amps TPN P No. 47 / I No.6.16.5 KPWD SR 2014-15**	No							
			3				3	1547.00	4641.00
25	Fabricating supplying and mounting MS box made out SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc , complete box of 21600sqcm @ Rs0.33 SWG **P.No. 49, I. No. 6.40.2 KPWD Electrical SR 2014-15**	Sq Cm							
	16SWG								
			3	21600.00			64800.00		
							64800.00	0.33	21384.00
26	Supplying and delivery at site brand new star / Essen/ Lotus/Sun-shines/Adarsh/ GK Controls best indigenous make combined energy meter cum- control panel board unit of size 600x450 x200 mm minimum mechanically strong vermin and water proof. The unit shall have two detachable doors suitable for operation on 3 ph, 50Hz, 380/440 volts, A.C supply with spring loaded latch, locking device with a key ribs should be provided inside the door, canopy apron and louvers ventilators shall be provided the combined energy meter cum-control panel board unit suitable for operation. The panel board shall be fabricated on single unit in the above components for suitable pumpset. **12.5HP to 15 HP Star Delta Starter SERDED Rate**	No.							
			3				3	11000.00	33000.00
27	Cutting of road surface for pipeline trenches and disposing the excavated stuff as directed including barricadding, danger lighting etc in the Asphalt Surface Road (P.N. 257, I.N. 37.38) PWD SR 2016-17	Cum							
			1	350.00	0.60	0.20	42.00		
							42.00	340.00	14280.00
	Basic Rate	340.00							
	Area Weightage @ 6%	20.40							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Total	**360.40**							
27 28	KSRB 2-2.1 : Earth work excavation for foundation of buildings, culverts water supply, sanitary line and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5m, in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m, after breaking of clods complete as per specifications, specification, No. KBS 2.1(a) / 2.3.5, No. 5/ Item No. 2.3) PWD SR 16-17	Cum							
			1	350.00	0.60	0.75	157.50		
							157.50	189.00	**29768.00**
	Basic Rate	189.00							
	Area Weightage @ 6%	11.34							
	Total	**200.34**							
29	Providing and fixing to wall, ceiling and floor, medium density polyethylene pipes 6.00 kgs/sq.cm working pressure 75mm outside diameter with special flange, compression type fittings, wall clips , making good the wall, ceiling and floor including cost all material, labour charges, HOM of equipments and testing complete as per specifications (P.N 93 I.N 13.70.3) P.W.D SR 2016-17	Rmtr							
	75 mm dia 6 KSC PVC pipe		1	250.00			250.00	320.12	**80030.00**
	Basic Rate	302.00							
	Area Weightage @ 6%	18.12							
	Total	**320.12**							
30	(P.N .93 I.N 13.70.3) 63 mm dia		1	100.00			100.00	289.38	**28938.00**
	(PWD SR 2016-17)								
	Basic Rate	273.00							
	Area Weightage @ 6%	16.38							
	Total	**289.38**							
31	KSRRB M400- Wet Mix Macadam - KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications MORTH Specification No. 406 (P.No.158 I.No.20.18)	Cum							
	PWD SR 2016-17		1	350.00	0.60	0.20	42.00		
							42.00	1668.00	**70056.00**
	Basic Rate	1668.00							
	Area Weightage @ 6%	100.08							
	Total	**1768.08**							

Sl	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
28	Refilling the basement and pipeline treanches with secleted available earthe for trench excavation including authority condition in layers from thedi including disponsary of the sunplus earth with a heavy 200 mtrs **Page No. 3 / Item No. 1.6 / PRED SR 2012-13**	Cum					126.00		~~7686.00~~
			80% Qty. Vide Item No. 27				~~1658.25~~	61.00	~~101163.00~~
	Basic Rate	61.00							
29	KSRB 13.6.3-6 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) **50mm** nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications Specification No. KBS 13.2.6/13.3 **P. 92 / I.13.37 PWD SR 2016-17**	Each	~~15~~ 17				~~15~~ 17	2175.12	~~32627.00~~ 36977.00
	Basic Rate	2052.00							
	Area Weightage @ 6%	123.12							
	Total	2175.12							
	BESCOM Deposit for Borewell	L/S	~~2~~ 3	~~11000.00~~ 13000					~~22000.00~~ 39000.00
								Sub Total	2291197.00
	KRIDL Service charge 8% + Labourecess 1%								206208.00
	Miscellaneous and Unforeseen Charges	L/S							2595.00
								Total	2500000.00

(Rupees Twenty five Lakhs Only)

CERTIFICATE:

1. The work spot has been inspected and the work is found necessary.
2. This estimate is prepared as per C.S.R. of PWD 2016-17, PWD Elecrical 2014-15, PRED 2012-13 & SE-RDED approved Rate.
3. The provisions were made in this estimate are necessary and adequate.
4. This works come under B.B.M.P. limits.

Assistant Engineer

Assistant Executive Engineer
Yelahanka Sub Division
BBMP, Bangalore-64

Administrative Approval

Accorded For ..... 25.00 lakhs.
Head of A/C..... P0190
CER NO :.....214..... **Dt:**..04.03.17

TA CE (YNK)

Executive Engineer
Yelahanka Division
BBMP, Bangalore-64

Technical Sanction
Accorded For ..... 25.00 lakhs.
Head of A/C..... P0190
CER NO :.....150..... **Dt:** 04.03.17

TA CE (YNK)